

Technomad

Audio. Anywhere.TM

SuperConductor User Manual

Version 1.0

How to work with the Technomad SuperConductor

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About SuperConductor

Welcome

The SuperConductor is a 1U, rack-mountable automatic MP3 player/recorder with internal clock and is ideal for themed entertainment, airport announcements, SFX, sports facilities, and more. The TCP/IP-based SuperConductor provides 1500 minutes of internal storage, is upgradable via firmware flashing, and is completely configurable through a web-based interface or an LCD front panel.

Values and Benefits

The Technomad SuperConductor has a number of valuable benefits:

- **Networkable**—the SuperConductor is easily networked so that it can be configured and controlled remotely (including audio playback)
- **Schedulable**—the SuperConductor can be schedule to play music at a certain time or a certain interval (i.e., every 30 minutes). A robust internal Real-Time Clock (RTC) or internet Time Server ensures accurate time
- **Audio Line-in**—the SuperConductor includes stereo line-in jacks that encodes recorded audio as high-quality (192kbps) MP3 sound files
- **Multi-assignments**—through the web-interface or front panel, music files stored on the SuperConductor can be assigned to one or more knob positions.
- **Integration**—the SuperConductor integrates with your existing audio systems (i.e. internal building audio systems) using standard line-level cables, or order it with any Technomad Turnkey PA System.

Understanding this Manual

This manual is organized accordingly:

- First, the manual gives you an understanding of how to operate and interact with the SuperConductor.

CHAPTER 1: ABOUT SUPERCONDUCTOR

- Next, the manual provides an understanding of how to setup and install the device
- After that, the manual delves into the interfaces (both Web and LCM)
- Finally, each feature is broken down according to a tab in the web interface. Where appropriate, these feature-based sections include the LCM equivalent.

Conventions

This guide uses the following conventions to highlight certain words and phrases that differentiate their meaning visually.

This style...	Indicates	For example:
<i>italics</i>	Notes regarding special information about a feature	<i>Note: You can also...</i>
bold	A feature of the interface or functionality within the Technomad SuperConductor	To open the document click on the Open button.

Chapter 2

SuperConductor Unit



The SuperConductor Unit is a 1U, rack-mountable schedulable MP3 player and recorder.

Audio Specifications

Playback:

- MP3 format audio, 32kbps to 320kbps
- Stereo or Mono
- Fixed or Variable Bit Rate

Recording:

- MP3 format audio, 192kbps, fixed bit rate, stereo

Physical Specifications

Attribute	Value
Dimensions	19" w x 1.75" h x 10" d
Weight	4lbs
Data input	RJ45 Ethernet jack
Audio input	1 x ¼" TRS (stereo), unbalanced, RCA standard, other connector types available by special order
Audio output	1 x ¼" TRS (stereo), unbalanced, RCA standard, other connector types available by special order
Mounting	Rackmount, 19" standard

Local Control Mode (LCM)



The SuperConductor includes a Local Control Mode that allows complete control and manipulation of the unit's features without having to interact with it via the web-based interface.

To access the LCM:

- Scroll to the last knob position with a sound assigned to it. If all positions are filled, the last knob position will be 99.

CHAPTER 1: ABOUT SUPERCONDUCTOR

- Once the last position is reached, turn the knob clockwise one additional time. This will display the LCM entry screen

Note: when the LCM entry screen displays, it will indicate the process for committing changes, via the LCM, to the SuperConductor unit. After changes are made using the LCM, reset the device to set the changes.

Controls



The SuperConductor unit has two primary controls:

- Knob—the knob turns clockwise and counterclockwise to navigate through functionality and assigned music. It also presses inward to commit selections and changes.
- Power Switch—the power switch turns the unit on and off

Ports and Inputs



The SuperConductor unit has the following ports:

Front Panel

- RJ45—the RJ45 port on the front of the unit provides connectivity to a standard network
- Serial Port—available through hatch

Back panel

- Line-Out—two standard 1 x ¼” TRS stereo speaker connections to connect to your sound system
- Line-In—one standard 1 x ¼” TRS stereo connection for microphone connection and audio recording
- Power—the table below provides information about the SuperConductor power requirements.

Item	output P-P	output RMS	working V	watts	current mA DC	current mA AC
------	---------------	---------------	--------------	-------	------------------	---------------

CHAPTER 1: ABOUT SUPERCONDUCTOR

Superconductor in chassis w/ CD (not on)*			115vac	13		130
Superconductor**	2.7vac	max . 9vrms	12vdc	8	250	100
Superconductor***	1.2vac	.250vrms				

* playing song .MP3 measured with Watts up

** measure p-p and RMS siren wail output 100%

*** output set to 70% matches CD player

The LCD Panel

The SuperConductor's primary interface is through the LCD panel. This LCD panel displays all information accessible through the control. Upon system start (and idle), the LCD panel displays the IP address assigned to the unit.

Startup

To startup the SuperConductor, flick the power switch upwards.

Setup and Configuration

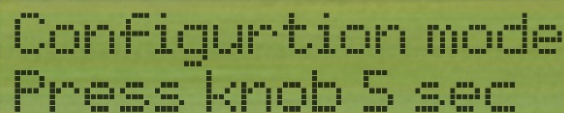
Prior to using the SuperConductor, you must connect it to your network so that it can be easily controlled via the web-based interface. The unit comes standard with the following IP configuration:

- IP—192.168.1.2
- Subnet—255.255.255.0

Configuring the SuperConductor

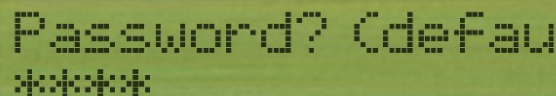
In order to configure the SuperConductor, you must first enable it to connect to your network. This can be done either through the LCM or Web-interface

The LCM



Configurtion mode
Press knob 5 sec

- First, set the unit into local configuration mode (LCM) by turning the knob one turn past the last music assignment until the above message appears.
- Press the knob until “Configuration” becomes “Entering Local Configuration Mode” (approximately 5 seconds)

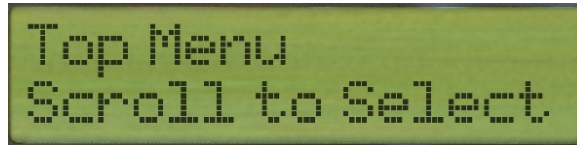


Password? Cdefau

- Upon first entering the LCM , you will be required to specify your password. The unit comes pre-configured with a default password of 0000.

CHAPTER 3: SETUP AND CONFIGURATION

- In authentication mode, the top line of the LCD will read "Password" and the bottom will read "*****" with the first "*" blinking.
- To set the password, turn the dial for each "*" until the appropriate digit is displayed. Press the knob to advance to the next digit. When finished, press the knob again. Upon successful authentication, the LCD will display "Main Menu"



There are three elements to connecting your SuperConductor to your network:

- IP address
- Subnet, and
- Router.

Timing

Before using the LCM to modify the unit, it is important to understand the timing required for employing the knob in order to prevent the unit from locking up.

The timing example below demonstrates setting a new schedule item. Note the "*wait*" points within the instructions.

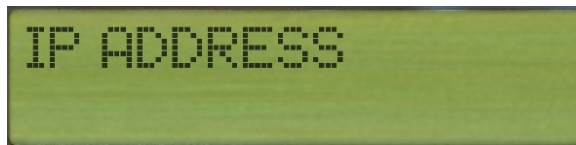
- Scroll past last knob setting (i.e. 41: FX_XPL):
- Press encoder center button for 5 sec to enter LCM dialog. Then click again to enter LCM. Enter password by turning and pushing the encoder switch.
- Scroll to 'Schedule'
- Push-click encoder button
- Click encoder clockwise beyond scheduled lines...see: "Add new line"?
- Press encoder button in... *wait*
- Scroll to 'file'
- Push-click encoder button on File... *wait*
- Scroll to see various files. Push-click on a file to select... *Wait*...then push encoder button on Edit... *wait*
- Right click to Day. Scroll right to Daily, Monday etc. Push-click on choice and *wait*...

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- Back to Edit. Push-click then Right-click scroll to Time. Push-click on Time. Set time using the encoder push and click functions... *wait*.
- Push click on Edit to continue editing or scroll to Exit and push-click... *wait*
- Push-click to Exit and Save. *Wait...*
- Scroll right to Exit and Push-click. Toggle-right with encoder switch between Yes or No
- Push-click Yes to Exit
- This brings you to the IP display
- Reset the IPAM

IP Address

To set the IP address using the LCM,



- From the Main Menu, turn the knob until the LCD reads "IP ADDRESS"
- Press the knob to select

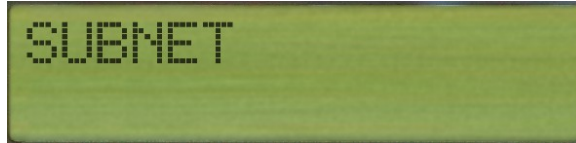


- When the "IP ADDRESS" option is selected, the top line of the LCD will read "Set IP Address" and the bottom line will display the IP address in the format of "XXX.XXX.XXX.XXX" with the first "X" of the first set blinking.
- To set each digit of the IP address, turn the dial for each "X" until the appropriate digit is displayed (0-9). Press the knob to advance to the next digit.
- When all digits are set, the top line of the LCD will display "IP Address Set to..." then "Click to Continue"

Subnet

To set the subnet using the LCM,

CHAPTER 3: SETUP AND CONFIGURATION



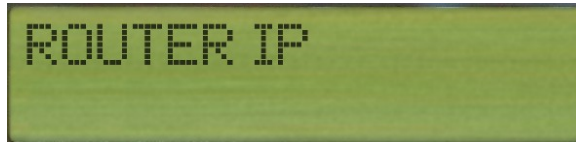
- From the Main Menu, turn the knob until the LCD reads "SUBNET"
- Press the knob to select



- When the "SUBNET" option is selected, the top line of the LCD will read "Set Subnet" and the bottom line will display the IP address in the format of "XXX.XXX.XXX.XXX" with the first "X" of the first set blinking
- To set each digit of the subnet address, turn the dial for each "X" until the appropriate digit is displayed (0-9). Press the knob to advance to the next digit.
- When all digits are set, the top line of the LCD will display "Subnet Address Set to..." then "Click to Continue"

Router

To set the Router IP using the LCM,



- From the Main Menu, turn the knob until the LCD reads "ROUTER IP"
- Press the knob to select



- When the "ROUTER IP" option is selected, the top line of the LCD will read "Set Router IP" and the bottom line will display the IP address in the format of "XXX.XXX.XXX.XXX" with the first "X" of the first set blinking
- To set each digit of the Router IP address, turn the dial for each "X" until the appropriate digit is displayed (0-9). Press the knob to advance to the next digit.

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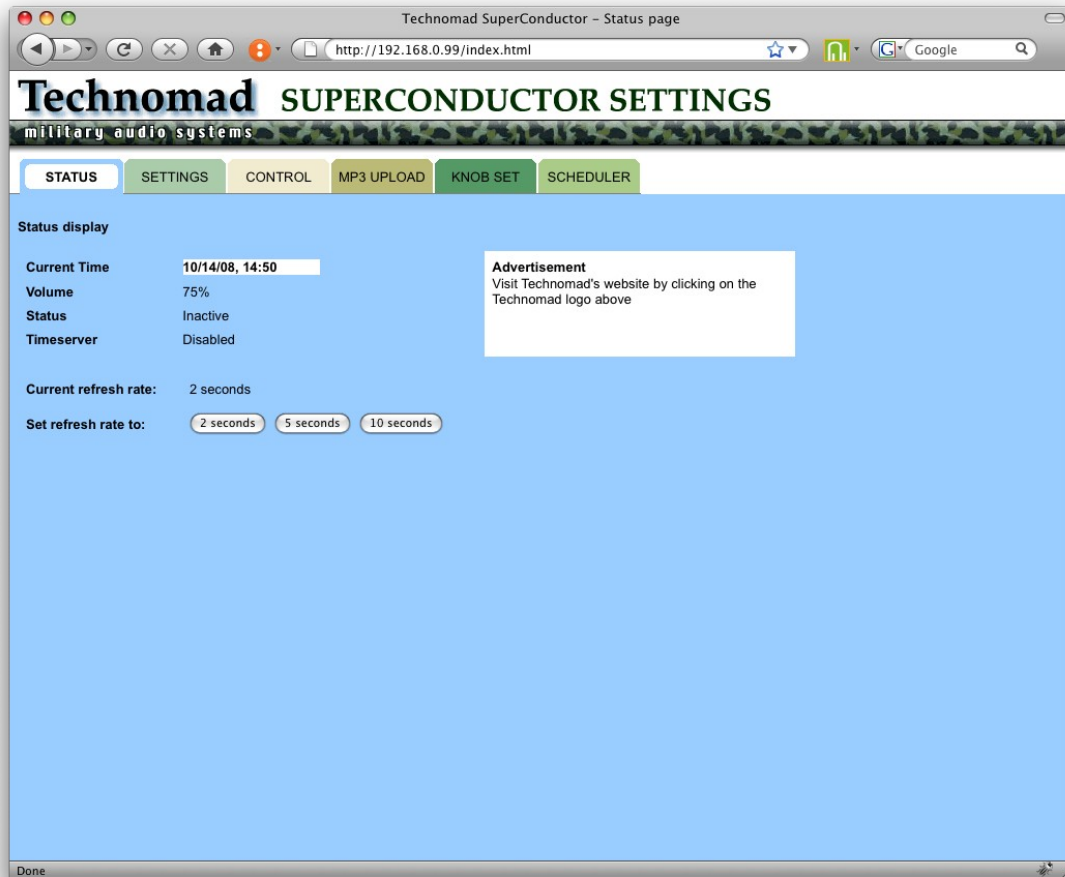
- When all digits are set, the top line of the LCD will display “Router IP Address Set to...” then “Click to Continue

The Web Control Panel

To set the IP address via the Web control panel,

- Plug the unit, via the RJ45 port, to a computer using a crossover cable
- Configure the computer’s IP address to an address that matches the configuration of the unit. So, if your SuperConductor is set to 192.168.1.2 (default) you might set your computer’s Local Area Connection to the following:
 - IP—192.168.1.200
- In configuring the unit the first time, you do not need to worry about the gateway IP or DNS servers when manually setting your computer’s network connection.
- Once you have configured your computer with the appropriate IP address (so that it exists within the same network as the unit), open your web browser to 192.168.1.2 This will allow you to configure the unit via the Web-based interface

CHAPTER 3: SETUP AND CONFIGURATION



- When first entering the Web-based interface, you will be asked to authenticate your identity. Simply enter the password (the username field is not used). The default password is 0000.
- Upon successful authentication, you can navigate through the interface.
- To set the IP address, click the **Settings Tab**. This will display the SuperConductor Settings screen.

CHAPTER 3: SETUP AND CONFIGURATION

Technomad SUPERCONDUCTOR SETTINGS

military audio systems

STATUS SETTINGS CONTROL MP3 UPLOAD KNOB SET SCHEDULER

Settings of this device

Volume: 75 %

IP Address: 192 . 168 . 0 . 99

Netmask: 255 . 255 . 255 . 0

Router IP Address: 192 . 168 . 0 . 1

Apply Cancel

System date: 10/14/08, 15:38

Set clock: Date: mm / dd / yy

Time: 00 : 00

Set time

Timeserver IP: 0 . 0 . 0 . 0

Time Shift: 0 : 00

Timeserver State: Off

Update timeserver

Old Password

New Password

Set Password

Reboot device

Volume: Choose the playback volume from 0% to 100% in 5% steps.

IP Address: Enter the 4 values of the desired device IP address e.g.: "192.168.1.2"

Netmask: Enter the 4 values of the desired Static IP e.g.: "255.255.255.0"

Router IP Address: Enter the 4 values of the desired Router IP address e.g.: "192.168.1.1"

Apply: To store the changes click on "Apply". The device will restart with the new setting.

Cancel: To discard the changes click on "Cancel".

System date: Displays the current system date and time.

Set clock: Use "Date" to set the system date in the format "mm/dd/yy". Use "Time" to set the system time in the format "hh/mm".

Set time: Click the "Set time" button to store the new system time and date. The device will restart with the new settings.

Timeserver IP: Enter the 4 values of the desired Timeserver IP.

Time Shift: Set "Time Shift" with the time server to your location. Example: HH = -10 MM = 20 will subtract 10h and 20min to the NTP server time. HH = +10 MM = 20 will add 10h and 20min to the NTP server time.

Timeserver State: Set "Timeserver" synchronization mode On or Off.

Update Timeserver: Apply "Timeserver" section changes.

Set, Old, New Password: Set the new system password for the WEB/LCM setting access. Password must be 4 characters length.

If no password is set, a single Set Password field is visible, otherwise the old password must be specified.

The configuration of the SuperConductor's network settings is specified in three fields:

- IP Address,
- Netmask (or Subnet), and
- Router IP Address
- For each of the specific fields, simply enter the appropriate IP address (as per your network requirements) and click the **Reboot Device Button**. This will reboot the SuperConductor with the new network settings.
- At this time, you should reset your computer's original network information and connect the SuperConductor to a switch or hub managed by your network.
- Once the SuperConductor is properly situated in your network, open the web browser on any PC connected to your network and browse to the IP address you specified above.

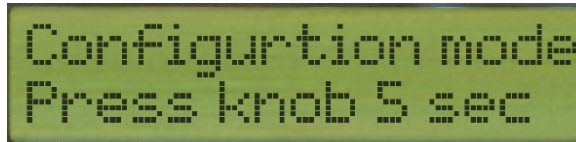
CHAPTER 3: SETUP AND CONFIGURATION

Logging In

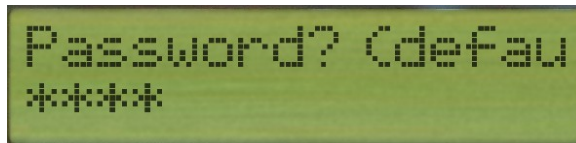
Authentication is required for modifying SuperConductor settings either through the LCM or Web-based interface.

LCM Login

To login through the LCM,



- First, set the unit into local configuration mode (LCM) by turning the knob one turn past the last music assignment. In a new unit, you shouldn't have any assigned slots.
- Press the knob for 5 seconds (as indicated on the LCD)
- Upon first entering the LCM , you will be required to specify your password. The unit comes pre-configured with a default password of 0000.



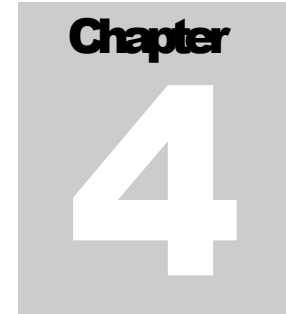
- In authentication mode, the top line of the LCD will read "Password" and the bottom will read "XXXX" with the first "X" blinking.
- To set the password, turn the dial for each "X" until the appropriate digit is displayed. Press the knob to advance to the next digit. When finished, press the knob again. Upon successful authentication, the LCD will display "Main Menu"

Web Interface

To login through the web-interface,

- Open a web-browser on a computer connected to the same network as the SuperConductor and browse to its IP Address (for more information about setting this IP address, see the Web Control Panel section in the Setup and Configuration chapter)
- When the web-control panel opens, a window will pop-up asking you for your username and password. Simply enter the password that you assigned to the unit during Setup and Configuration. If you have not assigned a password, the default password is 0000. The username is not required.

CHAPTER 3: SETUP AND CONFIGURATION



Interface

The SuperConductor provides two interfaces:

- The Local Control Mode (LCM), and
- The Web Control Panel.

The Local Control Mode (LCM)

The Local Control Mode (LCM) is accessible through the knob and LCD panel on the front of the unit:

- By turning the knob, you can cycle through current music that has been uploaded to the unit and select one to begin playing immediately
- You can perform a number of configuration and settings tasks by logging in and navigating the LCM menu options. Note: these options will be described in more detail in the appropriate section of this manual.
 - SET PASSWORD
 - TIME
 - DATE
 - LIBRARY
 - KNOB SET/RECORD
 - IP ADDRESS
 - SUBNET
 - ROUTER IP
 - REMOTE CONTROL

CHAPTER 4: INTERFACE

- LOCKOUT
 - SCHEDULE
 - EXIT
- Upon successfully logging in to the LCM, you can navigate through the menu options listed above by turning the knob.
 - To dive into a menu option, simply press the knob

For more information about logging into the LCM, see the Logging-in section of this manual.

Exiting

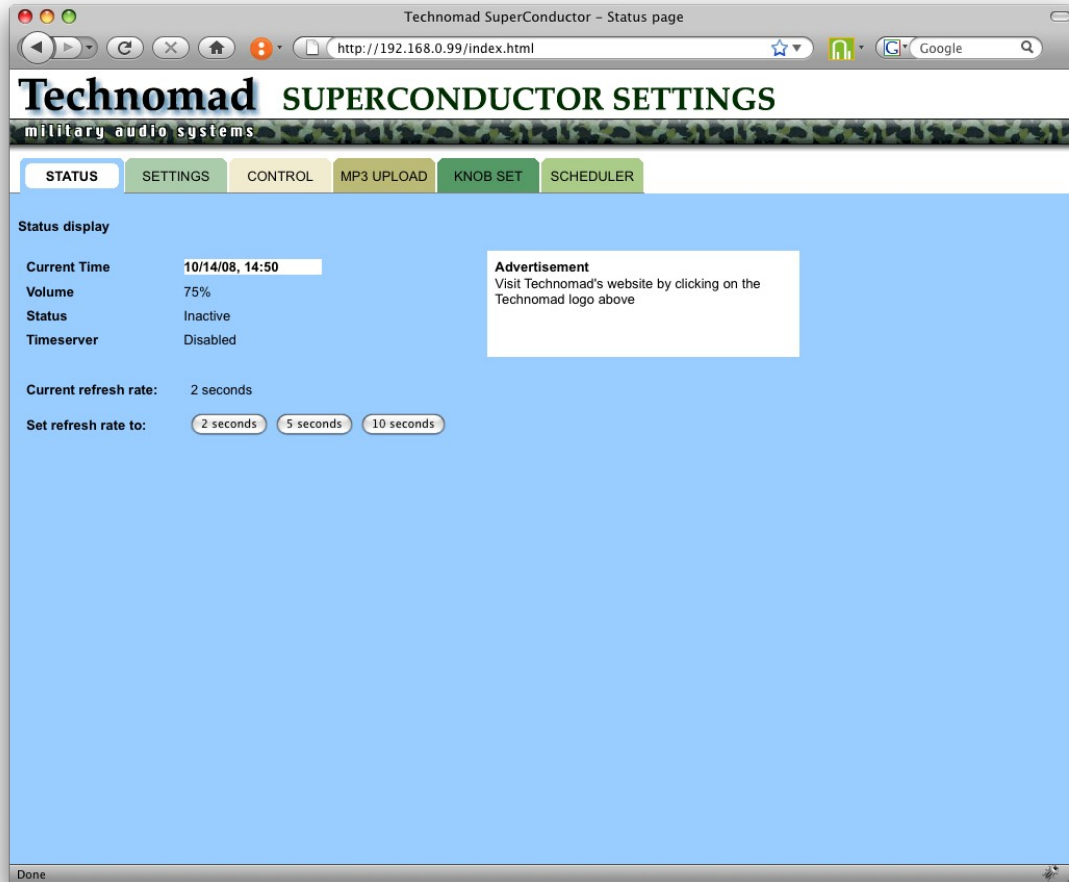
To exit the LCM mode and save any changes you have made, browse to the EXIT top-level menu and press the knob. This will commit your changes to the unit's non-volatile memory and reboot the unit for the changes to take effect.

Quick Access

See Appendix B for a one-page quick-access guide to operating the LCM.

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Web Control Panel



The Web Control Panel is divided into six main tabs:

- Status
- Settings
- Control
- MP3 Upload
- Knob Set, and
- Scheduler

To access the feature, simply click on the appropriate tab.

Each screen is divided into two main areas:

- Left—on the left-hand side of each tab screen are the tab controls. These allow you to set unit-specific information

CHAPTER 4: INTERFACE

- Right—on the right-hand side of each tab screen are directions and identifiers for the controls on the left.

Exiting

To exit from the Web-control panel, simply close your web browser. If you wish to commit changes made during your session, you must click the appropriate buttons:

- Settings—if you change anything on the Settings tab, you need to click the **Reboot Button** at the bottom to commit the changes to the unit's non-volatile flash memory and reboot the SuperConductor
- Knob Set and Scheduler—click the **Save Button** to commit choices and changes

Note: if you leave the unit in the LCM, you cannot make any changes. The unit must be enabled and operating in normal mode for changes to be made through the web-control panel.



Working With the SuperConductor

Whether it's working through the LCM or the Web-based interface, the SuperConductor is easily controlled and configured to meet your specific audio needs.

The following represent the features of the Technomad SuperConductor:

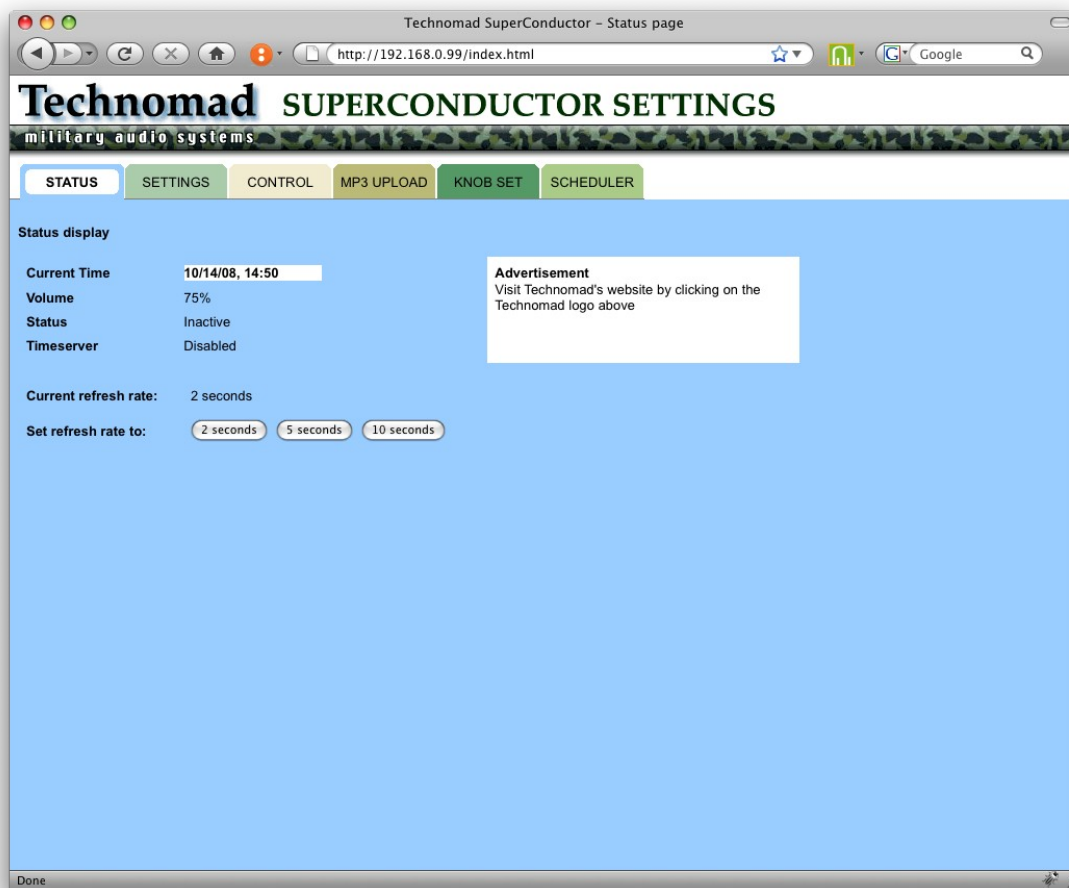
- Status,
- Settings,
- Remote Control,
- Recording Audio,
- MP3 Files,

CHAPTER 4: INTERFACE

- Knob Management,
- Scheduling,
- Playing Sounds, and
- Security.

For this manual, each of the above features (where applicable) will be divided into Web-based interface and LCM.

Status



The Status tab provides a quick overview of the unit's current status:

- Current Time—the unit's current time (either using the unit's internal clock or a timeserver). This can be specified in the Settings tab.
- Volume—the unit's current volume. This can be specified in the Settings tab.
- Mode—the current state of the unit. Options for this include:

CHAPTER 4: INTERFACE

- Inactive—the unit is currently idle
- {file name}—if a music file is currently playing, it is displayed here
- Configuration—the unit is in LCM mode
- Timeserver—the IP address of the time server (if specified)
- Current refresh rate—how often the Web-based interface will refresh. To change the rate, click the appropriate button:
 - Refresh every 2 seconds
 - Refresh every 5 seconds
 - Refresh every 10 seconds

Settings

Web Based Control Panel

The screenshot shows a web browser window titled "Technomad SuperConductor - Settings" with the URL "http://192.168.0.99/settings.html". The page has a header with the "Technomad SUPERCONDUCTOR SETTINGS" logo and a navigation bar with tabs: STATUS, SETTINGS (active), CONTROL, MP3 UPLOAD, KNOB SET, and SCHEDULER. The main content area is titled "Settings of this device" and contains several sections:

- Volume:** A slider set to 75%.
- IP Address:** Four input fields with values 192, 168, 0, 99.
- Netmask:** Four input fields with values 255, 255, 255, 0.
- Router IP Address:** Four input fields with values 192, 168, 0, 1.
- Buttons:** "Apply" and "Cancel".
- System date:** A date field showing "10/14/08, 17:59".
- Set clock:** Fields for "Date" (mm/dd/yy) and "Time" (hh:mm).
- Buttons:** "Set time".
- Timeserver IP:** Four input fields with values 0, 0, 0, 0.
- Time Shift:** Two input fields with values 0 and 00.
- Timeserver State:** A dropdown menu set to "Off".
- Buttons:** "Update timeserver".
- Old Password:** An empty input field.
- New Password:** An empty input field.
- Buttons:** "Set Password" and "Reboot device".

On the right side of the page, there is a detailed help section with the following text:

Volume: Choose the playback volume from 0% to 100% in 5% steps.

IP Address: Enter the 4 values of the desired device IP address e.g.: "192.168.1.2"

Netmask: Enter the 4 values of the desired Static IP e.g.: "255.255.255.0"

Router IP Address: Enter the 4 values of the desired Router IP address e.g.: "192.168.1.1"

Apply: To store the changes click on "Apply". The device will restart with the new setting.

Cancel: To discard the changes click on "Cancel".

System date: Displays the current system date and time.

Set clock: Use "Date" to set the system date in the format "mm/dd/yy". Use "Time" to set the system time in the format "hh/mm".

Set time: Click the "Set time" button to store the new system time and date. The device will restart with the new settings.

Timeserver IP: Enter the 4 values of the desired Timeserver IP.

Time Shift: Set "Time Shift" with the time server to your location. Example: HH = -10 MM = 20 will subtract 10h and 20min to the NTP server time. HH = +10 MM = 20 will add 10h and 20min to the NTP server time.

Timeserver State: Set "Timeserver" synchronization mode On or Off.

Update Timeserver: Apply "Timeserver" section changes.

Set, Old, New Password: Set the new system password for the WEB/LCM setting access. Password must be 4 characters length.

If no password is set, a single Set Password field is visible, otherwise the old password must be specified.

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The Settings tab provides access to a number of SuperConductor configuration settings including:

- Volume,
- Network,
- Date/Time, and
- Password.

Volume

Use the drop-down menu to select the volume level in increments of 5%.

Network

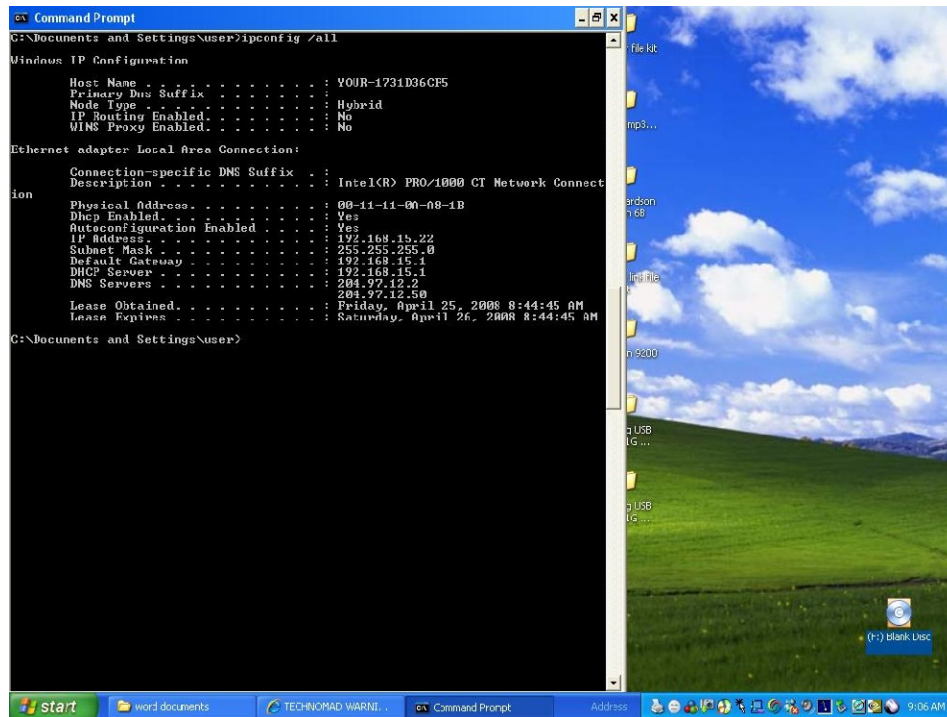
You can specify the following:

- IP Address—the IP Address of the unit
- Netmask—the Subnet address of the unit
- Router IP address—the IP address of the router to be used by the unit (this is for remote control and time-server connectivity)

If you don't have critical network information available (i.e., subnet mask and routerIP/gateway), you can obtain that information from the computer on which you are working:

- Open a command prompt on your computer
- When the command prompt opens, enter "configip/all" and press the **Enter Key**.

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- This will display a list of IP addresses associated with each of the network connections on your computer. From this output, you can get the following address required to configure the SuperConductor:
 - Subnet Mask = Netmask
 - Default Gateway = RouterIP Address

Date and Time

There are two methods by which to specify the date and time:

- Manual, or
- Time Server.

To specify the date/time manually:

- Date—enter the month, day, and year in the appropriate text fields.
- Time—use the drop-down menus to select the hours and minutes.

Note: once set, the unit will increment the date and time using its internal clock.

To specify the date/time using the time server,

- Timeserver IP—enter the IP address of the timeserver

CHAPTER 4: INTERFACE

- Time shift—using the drop-down, select the hours and minutes of shift between your timezone and the timeserver. For example, if the time server is in London and you are in California, the hour shift would be 8
- Timeserver State—use the drop-down to select to have the unit synchronize automatically with the time server
- When finished, click the **Update Timeserver Button** to commit the changes

Note: before changing the timeserver IP, it is a good idea to make sure that your SuperConductor has a valid IP address and gateway. If it does not, it won't be able to find the IP address of the timeserver you are specifying.

Password

To change the password,

- Enter the old password first, then
- Enter the new password
- Click the **Set Password** button to commit the changes

Note: password must be 4 digits in length. Numbers only.

LCM

Through the LCM, you can modify the following settings:

- Network,
- Date,
- Time, and
- Password.

Note: this section assumes that you have already logged into the LCM. For more information about logging in, see the LCM Logging-in Section of the Setup and Configuration Chapter.

IP Address

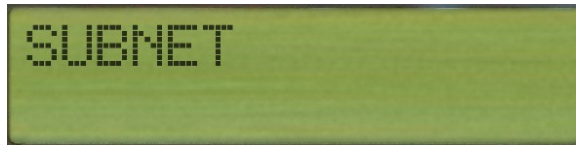
To set the IP address,

- From the Main Menu, turn the knob until the LCD reads "IP ADDRESS"
- Press the knob to select

CHAPTER 4: INTERFACE

- When the “IP ADDRESS” option is selected, the top line of the LCD will read “Set IP Address” and the bottom line will display an IP address masking in the format of “XXX.XXX.XXX.XXX” with the first “X” of the first set blinking
- To set each digit of the IP address, turn the dial for each “X” until the appropriate digit is displayed (0-9). Press the knob to advance to the next digit.
- When all digits are set, the top line of the LCD will display “IP Address Set to...” then “Click to Continue

Subnet



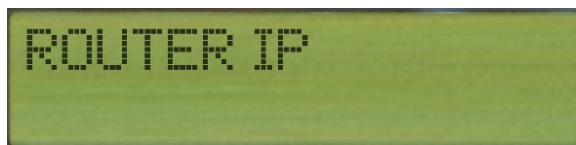
- From the Main Menu, turn the knob until the LCD reads “SUBNET”
- Press the knob to select



- When the “SUBNET” option is selected, the top line of the LCD will read “Set Subnet” and the bottom line will display the IP address in the format of “XXX.XXX.XXX.XXX” with the first “X” of the first set blinking
- To set each digit of the subnet address, turn the dial for each “X” until the appropriate digit is displayed (0-9). Press the knob to advance to the next digit.
- When all digits are set, the top line of the LCD will display “Subnet Address Set to...” then “Click to Continue

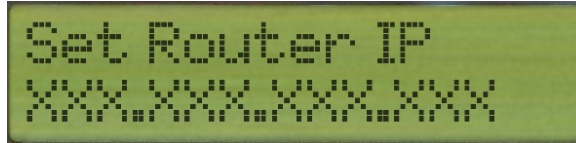
Router IP

To set the Router IP using the LCM,



- From the Main Menu, turn the knob until the LCD reads “ROUTER IP”
- Press the knob to select

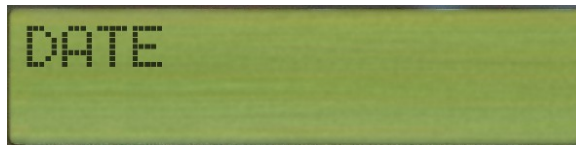
CHAPTER 4: INTERFACE



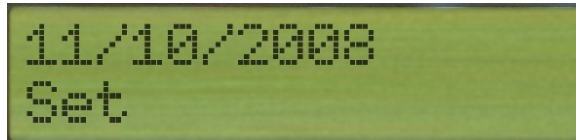
- When the "ROUTER IP" option is selected, the top line of the LCD will read "Set Router IP" and the bottom line will display the IP address in the format of "XXX.XXX.XXX.XXX" with the first "X" of the first set blinking
- To set each digit of the Router IP address, turn the dial for each "X" until the appropriate digit is displayed (0-9). Press the knob to advance to the next digit.
- When all digits are set, the top line of the LCD will display "Router IP Address Set to..." then "Click to Continue"

Date

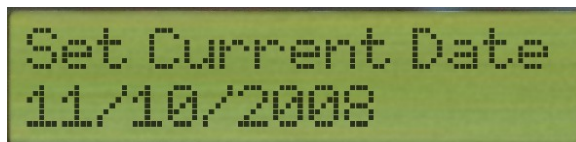
To set the Date,



- From the Main Menu, turn the knob until the LCD reads "DATE"
- Press the knob to select. This will enter the Date Setting feature.



- The top of the LCD display will read the current date
- The bottom of the LCD will flash the "Set" command. Press the knob to set the date.



- When you activate the Set command, the top LCD will then read "Set Current Date" and the bottom will read the current date with the first digit flashing. To change the date, simply use the knob to change currently-activate digit (blinking) from 0-9. Press the knob to advance to the next digit.

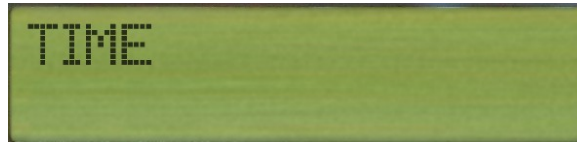
CHAPTER 4: INTERFACE

- When you have navigated through all the digits in the date, the LCM will automatically return to the top-level menu

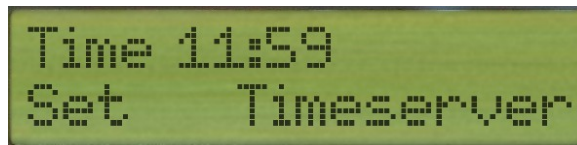
Time

There are two elements to time setting through the LCM:

- Manual time, and
- Timeserver



- From the Main Menu, turn the knob until the LCD reads "TIME"
- Press the knob to select. This will enter the Time set feature:



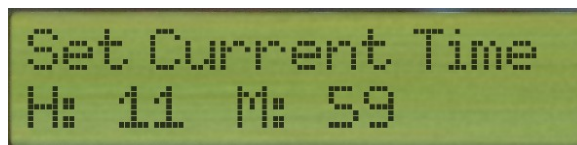
- The top of the LCD display will read the current time
- The bottom of the LCD will flash the "Set" command and the "Timeserver" command. Use the knob to select either the "Set" option (for manual) or the "Timeserver" option to specify timeserver settings.

Manual

To set the time manually,



- Select the "Set" command from the Time menu by pushing the knob. This will display the following LCD configuration:



- The top of the LCD will read, "Set Current Time"
- The bottom of the LCD will be split into "H" (for hours) and "M" (for minutes).

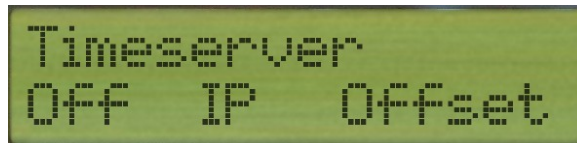
CHAPTER 4: INTERFACE

- To set the hours, press the knob when the current value for the hours is blinking. Then, use the knob to select a value from 1-24. When you set the hour, the minutes will blink.
- To set the minutes, press the knob when the current value for the minutes is blinking. Then, use the knob to select a value from 1-60.
- When you set the minutes, the LCM will return to the top-level menu.

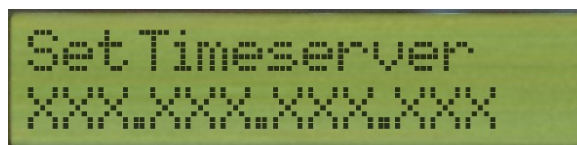
TimeServer

To specify timeserver settings,

- Select the “Timeserver” command from the Time menu by turning the knob to set the command blinking and pushing the knob to select it. This will display the following LCD configuration:



- The top of the LCD will read, “Timeserver”
- The bottom will have three additional commands:
 - Off/On:
 - When blinking, press the knob to either turn the feature on or off (depending upon what is currently selected). The LCM will automatically save the settings and return you to the TimeServer menu.
 - IP address:
 - When blinking, press the knob to display an IP Address entry screen.



- The top line of the LCD will read “Set Timeserver” and the bottom line will display an IP address masking in the format of “XXX.XXX.XXX.XXX” with the first “X” of the first set blinking

CHAPTER 4: INTERFACE

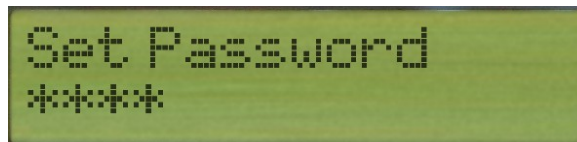
- To set each digit of the timeserver address, turn the dial for each “X” until the appropriate digit is displayed (0-9). Press the knob to advance to the next digit.
- When all digits are set, the top line of the LCD will display “Timeserver Address Set to...” then “Click to Continue”
- Offset:
 - When blinking, press the knob to display an entry mechanism for an hour and minute offset from the timeserver:
 - The top line of the LCD will read “Enter the time offset from the timeserver to your location”
 - The bottom of the LCD will flash the “Set” command and the “Timeserver” command. Use the knob to select either the “Set” option (for manual) or the “TimeServer” option to specify timeserver settings.

Password

To specify a new password:

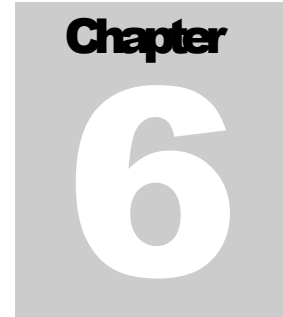


- From the Main Menu, turn the knob until the LCD reads “SET PASSWORD”
- Press the knob to select. This will enter the Password Set feature.



- The top line of the LCD will read “Set Password” and the bottom will read “XXXX” with the first “X” blinking.
- To set the password, turn the dial for each “X” until the appropriate digit is displayed. Press the knob to advance to the next digit. When finished, press the knob again. This will automatically commit the settings and return you to the main LCM menu.

CHAPTER 4: INTERFACE



Remote Control

The remote control feature allows you to play sounds on the SuperConductor unit from within the web interface.

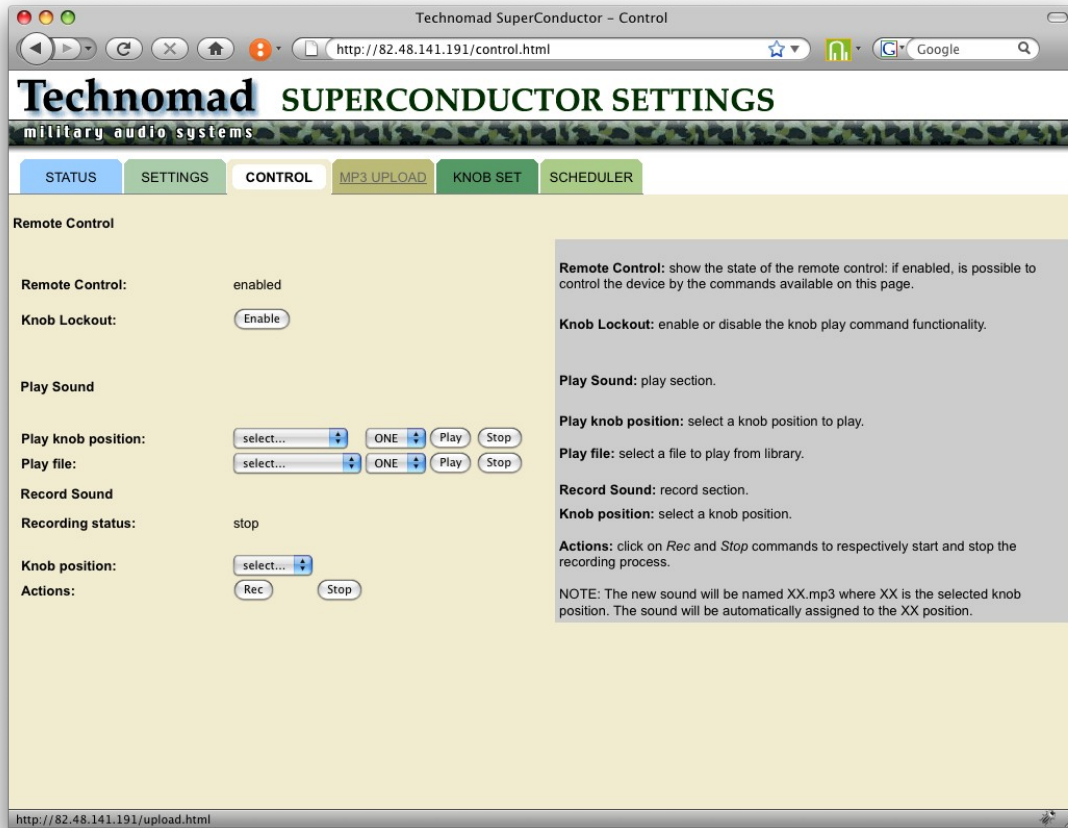
Enabling the Remote Control

The Remote control feature, by default, is enabled.

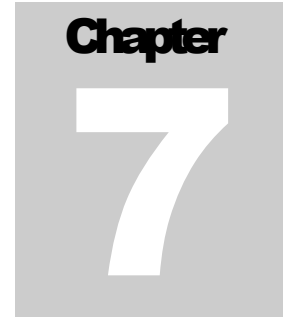
Web Interface

To play a file from the web interface,

CHAPTER 6: REMOTE CONTROL



- Use the **Play File Drop-down** to select the file that you wish to play
- Once you have selected the file, use the secondary drop-down to select how the file should be played. Options include:
 - Once,
 - Loop
- To play the selected file, click the **Play Button**. To stop the playback, press the **Stop Button**.



Recording Audio

The Technomad SuperConductor features a dedicated line-in to enable direct recording (rather than file upload). Once a microphone is connected to the line-in, audio recording can be controlled by the web-interface and the LCM.

Note: the SuperConductor records in .MP3 format.

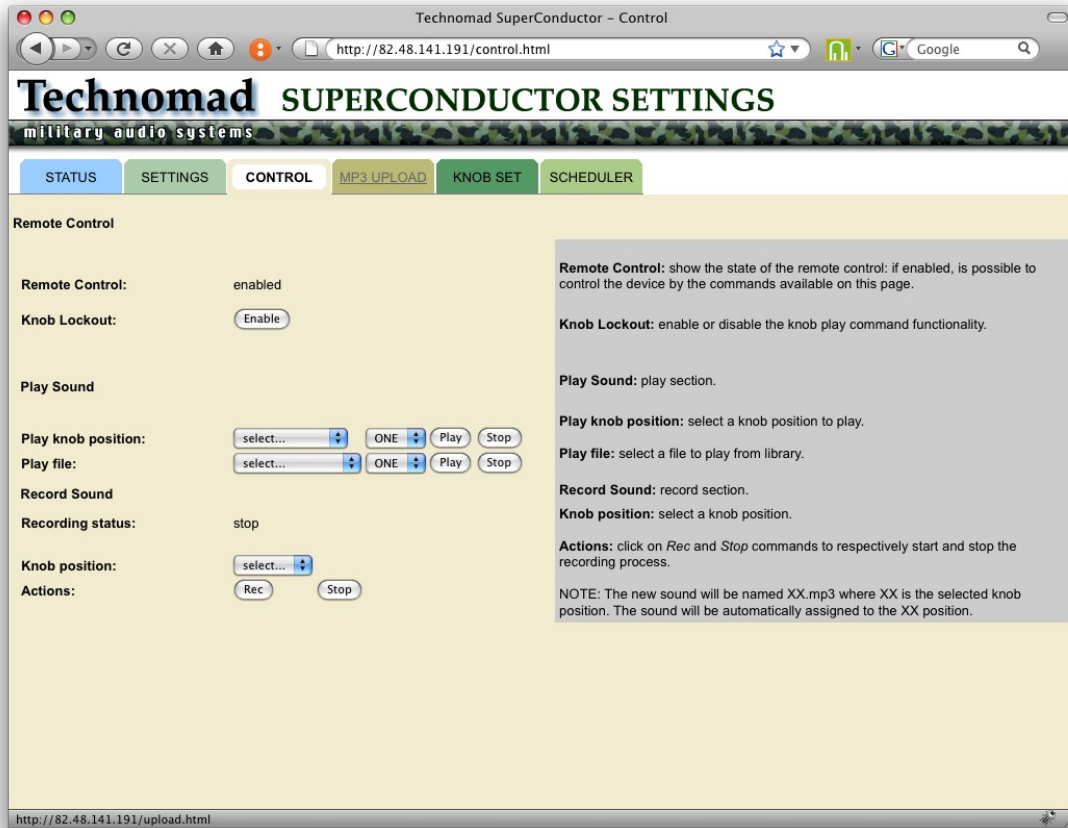
The Technomad SuperConductor features a dedicated line-in audio input to enable direct recording (rather than file upload). Like any recording device, audio levels should be set before making the audio recording (connection to line level mixer output best) and a quick test recording should be made.

The actual audio recording will take place through an audio input device (i.e. microphone) connected to the sound system that is connected to your SuperConductor through the dedicated, stereo Line In connection on the back of the unit.

Web Interface

Recording audio from the web-interface is carried out through the Control Tab.

CHAPTER 7: RECORDING AUDIO



- Scroll to Recording Status on Control page
- Select unused knob position i.e. 41 (Knob Position)
- Set record level: Click on 'Rec' (Action) and send an audio signal to the stereo Line Rec inputs of the Superconductor for 15 seconds. Click 'Stop' (action) Note: Stereo Line Outputs are connected to your audio playback system
- Select knob position 41 (Play Knob Position) click 'Play'. If the level is the level you want. Proceed with recording process. Set the desired record level now. Do not overdrive the Rec inputs.
- When your recording is through, click 'Stop'. (Actions)
- Your audio recording has been assigned an alpha-numeric file name i.e. 060606F4 and is assigned to knob 41
- To rename this file, you must go to the "Knob Set" page and save position 41 to 'not selected'

LCM

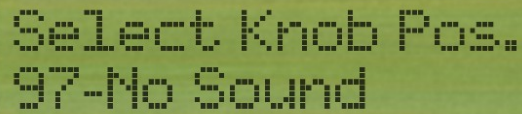
To record audio via the LCM,

CHAPTER 7: RECORDING AUDIO



SET/RECORD

- From the Main Menu, turn the knob until the LCD reads “KNOB SET/RECORD”




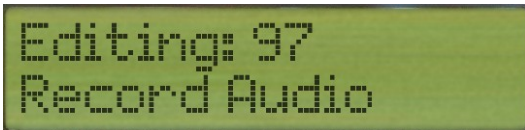
Select Knob Pos.
97-No Sound

- Press the knob to select. Once selected, the top line will read “Select Knob Pos.” This is because the first step to recording audio via the LCM is to select the knob position to which to assign it. Turn the knob until you find an open slot and press the knob to select it. Note: if you select a knob position that currently has a file assigned to it, you will overwrite the position but the file will remain on the unit.



Editing: 97
Click to Select

- When you select a knob position, the top line of the LCD will change to “Editing: {knob position #}.” You can then perform two actions by turning the knob:

	
Assign Audio	Record Audio

- Select the record audio option and press the knob.

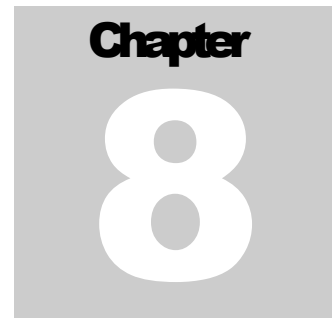


97: Record Audio
Record

- The top line of the LCD will now read “{knob position #} Record Sound.” The bottom line of the LCD will inform you that any existing sound attached to the knob position you have selected will simply be moved to the library and the new, recorded sound assigned to the selected position.
- To record the audio, turn the knob until the option on the bottom line of the LCD reads “record.” Press the knob to begin recording. The bottom line of the LCD will read, “recording...”

CHAPTER 7: RECORDING AUDIO

- To stop recording, press the knob again
- When you stop recording, the LCD will display a success message and then present options for playback mode for the newly recorded file:
 - Loop
 - One-Time
 - Push-Hold
- Once you select a playback mode, you will be returned to the top-level menu.



Managing Files

The Technomad SuperConductor includes 1GB of non-volatile storage for uploaded and recorded audio files in .mp3 format.

Requirements

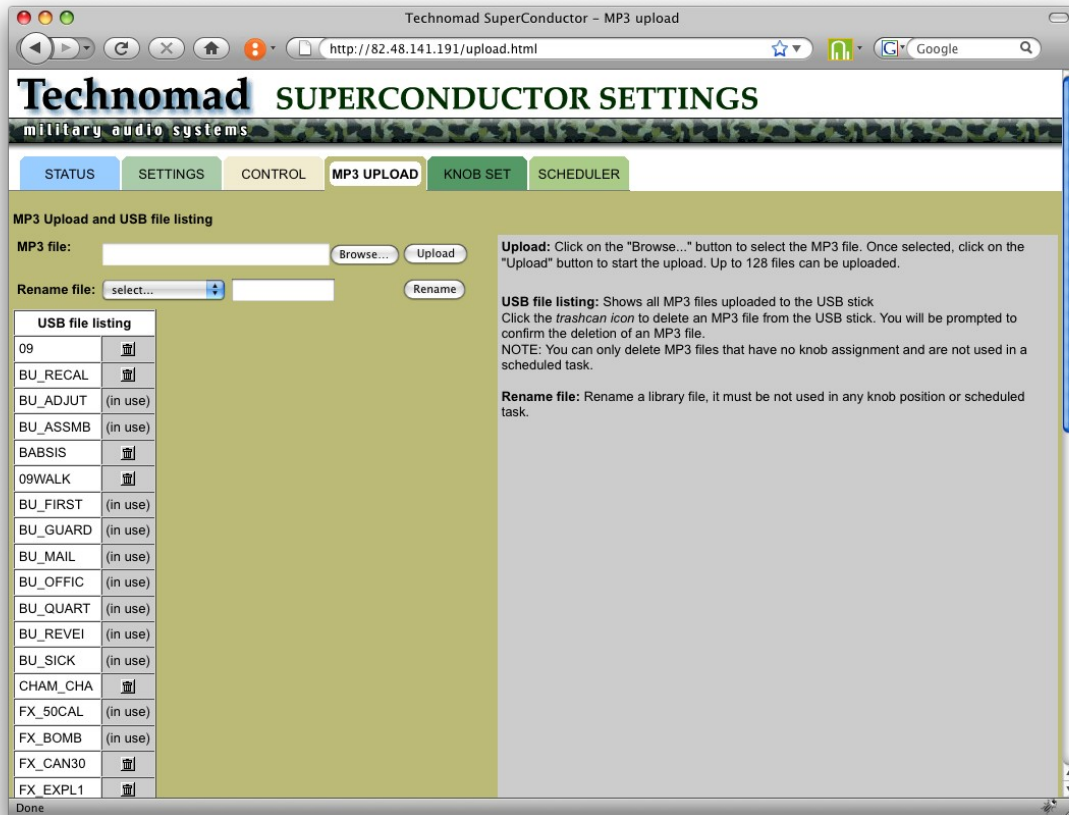
The SuperConductor has the following audio file requirements:

- .MP3 only at present (but will play any bitrate up to 320kbps, fixed or VBR.

Uploading

Audio files can be uploaded through the MP3 Upload tab in the web-interface.

CHAPTER 7: RECORDING AUDIO



To upload a file,

- Click the **Browse Button** to open a dialog box allowing you to find the file on your hard drive.
- When you have selected the file, the dialog box will close and the file name/location will be displayed in the MP3 File textbox
- Click the **Upload Button** to upload the file to the unit

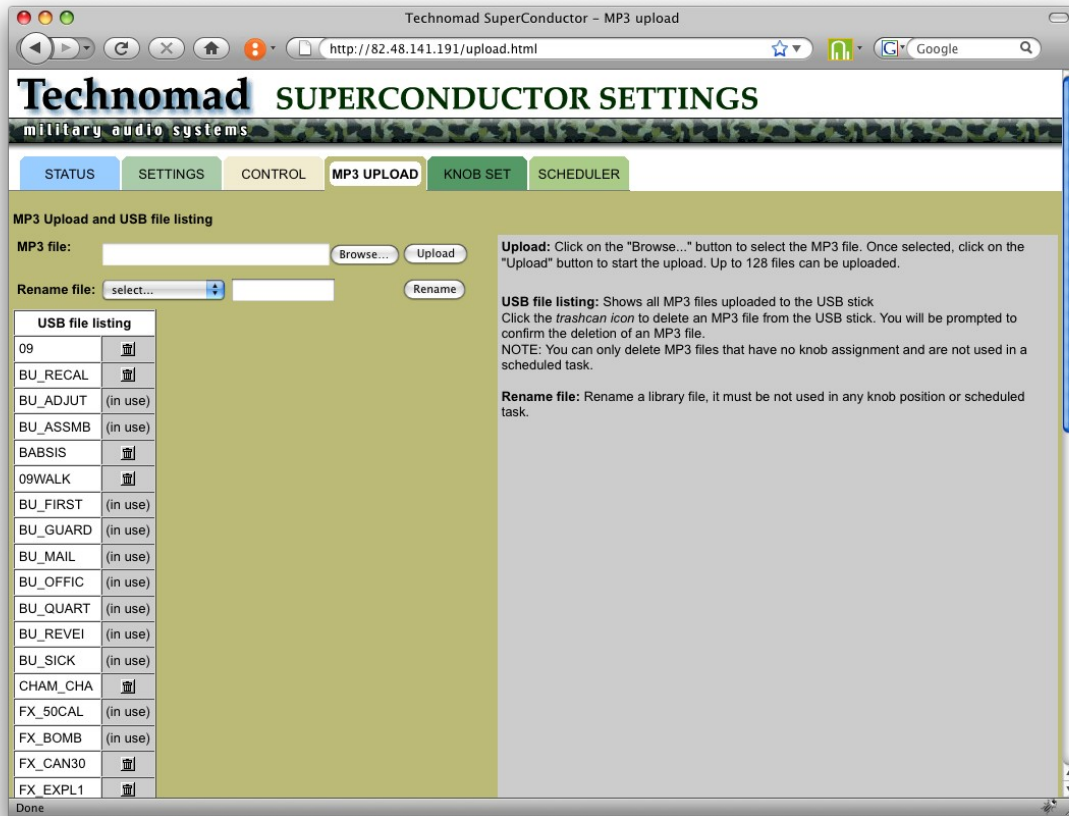
When the file has been successfully uploaded, it will be listed at the bottom of the file list.

Renaming Files

Audio files can be renamed through the MP3 Upload tab in the web-interface as well as the LCM

CHAPTER 7: RECORDING AUDIO

Web Interface



To rename a file,

- Select the file to rename from the **Rename File Drop-down**.
- Once you have selected the file, enter the new name in the adjoining text field.
- Finally, click the **Rename Button**.

Note: file names cannot be longer than eight characters. Remember, to rename a file, it must first be removed from any knob setting [knobset] or scheduled assignment [scheduler].

LCM

To delete a file via the LCM,



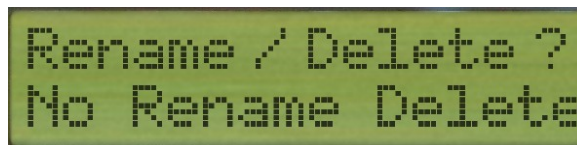
- From the Main Menu, turn the knob until the LCD reads "LIBRARY"

CHAPTER 7: RECORDING AUDIO

- Press the knob to select
- The top line of the LCD will read, “Sound Library”



- To navigate to a file to delete, use the knob to scroll through the library. When you reach the file you wish to remove, push the knob. This will display three options for the file:



- No—return to the library and take no action against the file
 - Rename—rename the file
 - Delete—delete the file
- Use the wheel to scroll through the options until the “Rename” is flashing. Press the knob to select the file.
- When you select a file to rename, the top line of the LCD will read, “New Name” and the bottom line will be the file with the first character flashing. Turn the knob to cycle through numerical and alphabetical characters. Press the knob to advance to the next letter. When finished, you will be returned to the top level of the Library.

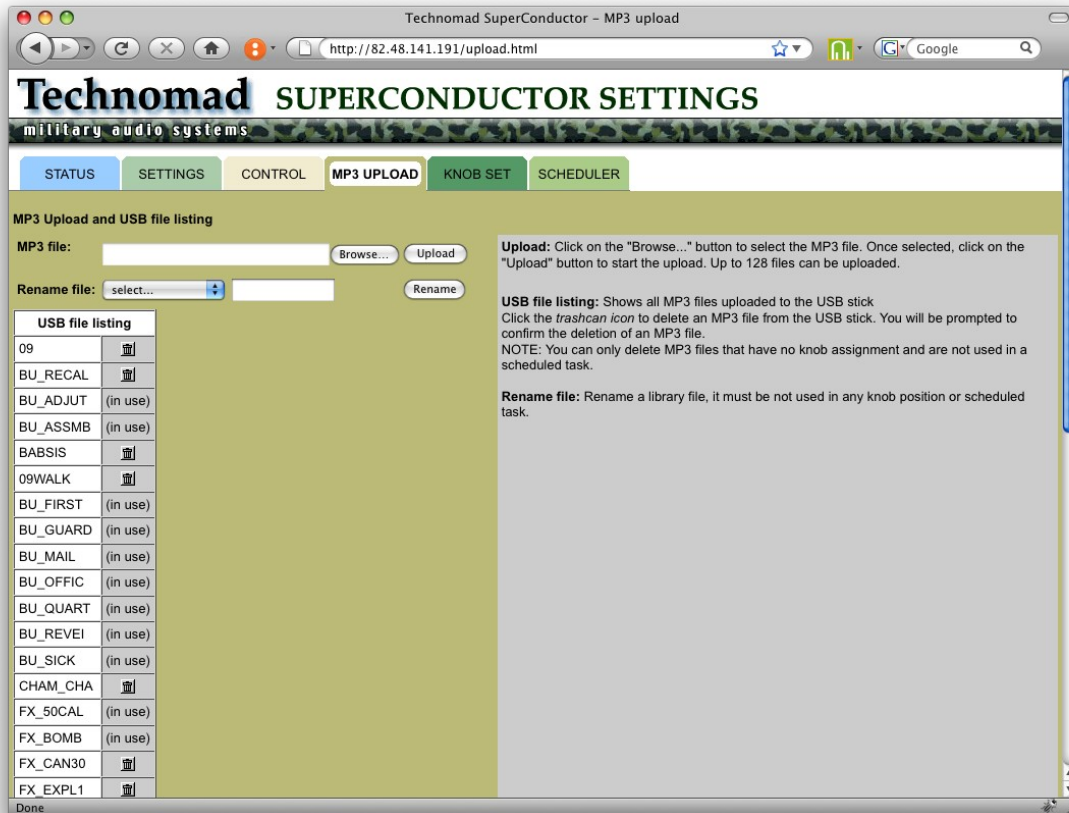
Deleting Files

Files uploaded or recorded to the unit can be deleted from both the web-interface and the LCM.

Web Interface

Audio files can be deleted through the MP3 Upload tab in the web-interface.

CHAPTER 7: RECORDING AUDIO



To delete a file,

- Click the **Trashcan Icon** next to the file you wish to remove from the file list on the MP3 UPLOAD page.

*Note: files can only be deleted from the USB storage via the MP3 UPLOAD page when they are not in use. If a file is in use, you will need to remove it from its knob position. To remove a file from its Knob position, you may click the trashcan on the knob setting line or enter the knob setting number in the knob setting field at the top of the page and choose 'not selected' then set and save or remove it from the scheduler. If it is a scheduled task, click the **del button** in the action section of the schedule. For more information about configuring files to knob positions, see the Knob Management chapter in this manual.*



Knob Management

The knob is the primary method by which audio is played on the unit. By assigning a file to a knob position (from 1 to 99), the audio file can be easily played from the unit simply by turning the knob to that position and pressing.

Through the web-interface and LCM, knob positions can be set and deleted.

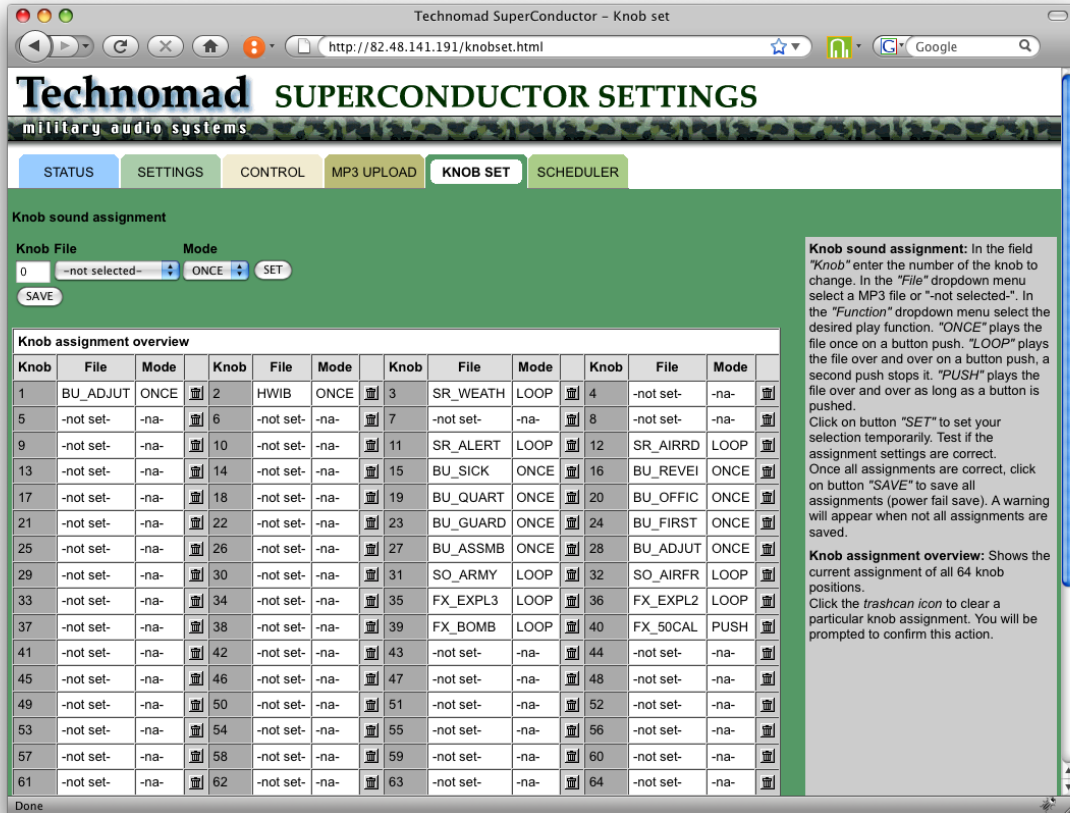
Setting Knob Positions

The knob positions can be set via the web-interface and the LCM

Web Interface

Knob positions are set in the web-interface from the Knob Set Tab.

CHAPTER 7: RECORDING AUDIO



To set a knob position,

- First, enter a knob position in the **Knob Text Field**. Note: if you select a knob position that is already filled, the new file will replace the existing file for that position (the file will not be deleted).
- Next, select the file you want to assign to that position by using the **File Drop-down**
- Then, select the playback mode for the knob position using the **Mode Drop-down**. Options include:
 - Once,
 - Loop, and
 - Push (the file will play as long as the knob is pressed in).
- Finally, click the **Set Button** to set the knob position.
- When you have made all the changes you wish to make to knob positions, click the **Save Button** to confirm the changes to the unit

CHAPTER 7: RECORDING AUDIO

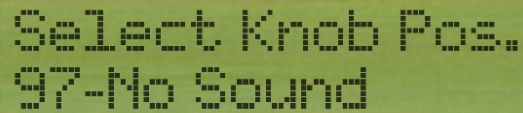
LCM

To assign an audio file to a knob position via the LCM,



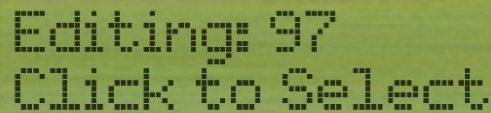
SET/RECORD

- From the Main Menu, turn the knob until the LCD reads “KNOB SET/RECORD”



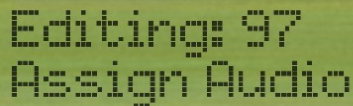
Select Knob Pos.
97-No Sound

- Press the knob to select. Once selected, the top line will read “Select Knob Pos.” This is because the first step to recording audio via the LCM is to select the knob position to which to assign it. Turn the knob until you find an open slot and press the knob to select it. Note: if you select a knob position that currently has a file assigned to it, you will overwrite the position but the file will remain on the unit.



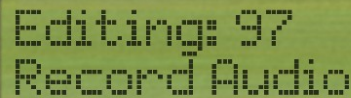
Editing: 97
Click to Select

- When you select a knob position, the top line of the LCD will change to “Editing: {knob position #}.” You can then perform two actions by turning the knob:



Editing: 97
Assign Audio

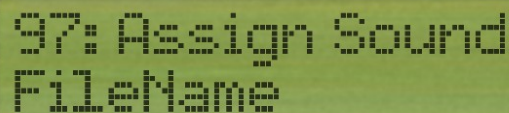
Assign Audio



Editing: 97
Record Audio

Record Audio

- Select the Assign Audio option and press the knob.



97: Assign Sound
FileName

- The top line of the LCD will now read “{knob position #} Assign Sound.” Use the knob to cycle through the library of sounds. The names of each file will appear in the bottom line of the LCD.

CHAPTER 7: RECORDING AUDIO

- When you have identified the file to assign to the selected knob position, press the knob. You will be returned to the top-level menu.

Clearing Knob Positions

The knob positions can be cleared via the web-interface and the LCM

Web Interface

Knob positions are cleared in the web-interface from the Knob Set Tab.

Technomad SuperConductor – Knob set

http://82.48.141.191/knobset.html

Technomad SUPERCONDUCTOR SETTINGS

military audio systems

STATUS SETTINGS CONTROL MP3 UPLOAD **KNOB SET** SCHEDULER

Knob sound assignment

Knob File: 0 -not selected- Mode: ONCE SET

SAVE

Knob assignment overview

Knob	File	Mode	Knob	File	Mode	Knob	File	Mode	Knob	File	Mode
1	BU_ADJUT	ONCE	2	HWIB	ONCE	3	SR_WEATH	LOOP	4	-not set-	-na-
5	-not set-	-na-	6	-not set-	-na-	7	-not set-	-na-	8	-not set-	-na-
9	-not set-	-na-	10	-not set-	-na-	11	SR_ALERT	LOOP	12	SR_AIRRD	LOOP
13	-not set-	-na-	14	-not set-	-na-	15	BU_SICK	ONCE	16	BU_REVEI	ONCE
17	-not set-	-na-	18	-not set-	-na-	19	BU_QUART	ONCE	20	BU_OFFIC	ONCE
21	-not set-	-na-	22	-not set-	-na-	23	BU_GUARD	ONCE	24	BU_FIRST	ONCE
25	-not set-	-na-	26	-not set-	-na-	27	BU_ASSMB	ONCE	28	BU_ADJUT	ONCE
29	-not set-	-na-	30	-not set-	-na-	31	SO_ARMY	LOOP	32	SO_AIRFR	LOOP
33	-not set-	-na-	34	-not set-	-na-	35	FX_EXPL3	LOOP	36	FX_EXPL2	LOOP
37	-not set-	-na-	38	-not set-	-na-	39	FX_BOMB	LOOP	40	FX_50CAL	PUSH
41	-not set-	-na-	42	-not set-	-na-	43	-not set-	-na-	44	-not set-	-na-
45	-not set-	-na-	46	-not set-	-na-	47	-not set-	-na-	48	-not set-	-na-
49	-not set-	-na-	50	-not set-	-na-	51	-not set-	-na-	52	-not set-	-na-
53	-not set-	-na-	54	-not set-	-na-	55	-not set-	-na-	56	-not set-	-na-
57	-not set-	-na-	58	-not set-	-na-	59	-not set-	-na-	60	-not set-	-na-
61	-not set-	-na-	62	-not set-	-na-	63	-not set-	-na-	64	-not set-	-na-

Done

Knob sound assignment: In the field "Knob" enter the number of the knob to change. In the "File" dropdown menu select a MP3 file or "-not selected-". In the "Function" dropdown menu select the desired play function. "ONCE" plays the file once on a button push. "LOOP" plays the file over and over on a button push, a second push stops it. "PUSH" plays the file over and over as long as a button is pushed. Click on button "SET" to set your selection temporarily. Test if the assignment settings are correct. Once all assignments are correct, click on button "SAVE" to save all assignments (power fail save). A warning will appear when not all assignments are saved.

Knob assignment overview: Shows the current assignment of all 64 knob positions. Click the trashcan icon to clear a particular knob assignment. You will be prompted to confirm this action.

To clear a knob position,

- Click the **Trash Can Icon** next to the knob position you want to clear. Note: the file will not be deleted.

Chapter 10

Scheduling

In addition to the remote control and knob-based playback of audio files, the SuperConductor also supports scheduled playback through the Schedule Manager via the web-interface and LCM.

Web Interface

Managing the schedule, which includes adding and deleting schedule tasks, via the web-interface is handled through the Scheduler Tab.

Technomad SUPERCONDUCTOR SETTINGS
military audio systems

STATUS SETTINGS CONTROL MP3 UPLOAD KNOB SET **SCHEDULER**

Scheduled Task Assignment

Insert	File	Date/Day
after Task 1	09.MP3	Date: -- / -- / -- or Day: --not selected--
Status: active		
At	Until	Every Repeat
00 : 00	-- : -- : --	Minutes 1

SET TASK

SAVE

[Jump to BOTTOM]

Scheduled tasks overview

Task#	File	Day/Date	Time	Until	Every	Repeat	Action
1	BU_MAIL	DAILY	10:01			1	off edit del

Delete all tasks

[Jump to TOP]

Done

Scheduled task assignment: In the section "Insert" you can determine the position at which the new task will be inserted. If you want to modify an existing task, you can select the insert mode "replace". Up to 100 entries can be entered. In the "File" dropdown menu select an MP3 file. In the "Date/Day" section you can either enter a specific calendar date or a general day assignment for the new task. Enter a start time for the task in the section "At". Enter an (optional) end time in the section "Until". With "Every" you can define an (optional) interval at which the task will be repeated. "Repeat" defines how many times the MP3 file will be played in single task execution.

Click on button "SET TASK" to set your selection temporarily. Click the "SAVE" button to save the task list permanently (power fail save). A warning message will appear if the list was modified but not saved.

Scheduled tasks overview: Shows the list of scheduled tasks in order of priority. You can activate/deactivate tasks by clicking the "on"/"off" button. Inactive tasks will be shown with a gray background. If you click the "edit" button, the task assignment form will be preset with the definitions of this particular task. You can then easily change a single parameter. By changing the insert mode (which defaults to "replace" for the edit function), you can also copy an existing task. You can delete a single task by clicking the "del" button. You will be prompted to confirm the deletion of a task. A task can be moved up or down within the list (thus changing its priority) by clicking the "up" or "down" buttons respectively. Clicking the "Delete all tasks" button will delete all tasks. You will be prompted to confirm this action.

CHAPTER 7: RECORDING AUDIO

The Scheduler tab is broken into two primary areas:

- Creating a scheduled task, and
- Managing existing tasks.

Creating a Scheduled Task

A scheduled task represents the playback of an audio file according to specific parameters (such as day/time to play, file to play, and how to play it). For each scheduled task, you can specify the following through the **Scheduled Task Assignment Table**:

- Insert—each task can be scheduled in relation to other tasks. Select where the new task should be inserted:
 - Before,
 - After, or
 - Replace an existing task.
- Task—set the task number that applies to the order of insertion
- Status—use the **Status Drop-down** to set the task to either Active or Inactive
- File—use the drop-down to select the file to which the task applies
- Date/Day—select a specific date (using the date drop-downs) or a day (for every week playback)
- Frequency—using the **At**, **until**, **Every**, and **Repeat** fields, you can specify the frequency of the task
 - At—select the time at which to start the playback of the select audio file
 - Until—select a time at which to stop the playback.
 - Every—set a number of minutes at which to repeat the file
 - Repeat—set a number of times the file should repeat
- To save the task immediately, click the **Set Task Button**. This will store the task in memory.
- To permanently save the task to the unit's non-volatile flash memory, click the **Save Button**.

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Note: Remember: It is important to know how long a file playing is. If the playing time runs into the next task, the lower priority task will not play.

Managing Existing Tasks

Existing scheduled tasks are located in the table at the bottom of the Scheduler tab.

For each scheduled task, you can:

- Turn it off,
- Edit it,
- Delete it.

Turn Off a Task

To turn off a task, click the **Off Button** in the **Action Column** of the scheduled tasks table.

Edit a Task

To edit an existing task, click the **Edit Button** in the **Action Column** of the scheduled tasks table. This will load the task detail into the **Scheduled Task Assignment Fields** for editing.

When you have made your changes, click the **Save Button** to confirm them into the units storage memory.

Delete a Task

To delete a task, click the **Del Button** in the **Action Column** of the scheduled tasks table.

Alternatively, you can click the **Delete All Tasks Button** to remove all scheduled tasks.

LCM

You can manage the schedule, which includes editing and deleting schedule tasks, as well as add new schedule items via the LCM.



- From the Main Menu, turn the knob until the LCD reads “SCHEDULE”
- Press the knob to select. Once selected, the top line will read “Schedule.” The bottom line displays, “Scroll down to view/edit”

CHAPTER 7: RECORDING AUDIO



01: Filename Day:
EDIT DEL OFF

- To find a scheduled task, turn the knob to scroll through the scheduled tasks. Each one will display (horizontally scrolling) as;
 - ##: FILENAME Day: datefield Time: timefield Until: untilfield
Every: everyfield Repeat: repeatfield
- To enter the modification mode, push the knob when the scheduled task you want to modify is displayed.
- The modification mode includes six options that can be scrolled through with the knob. To select an option, push the knob in when it blinks:
 - EDIT
 - DEL
 - OFF/ON
 - DOWN
 - UP
 - EXIT

Editing a Scheduled Task

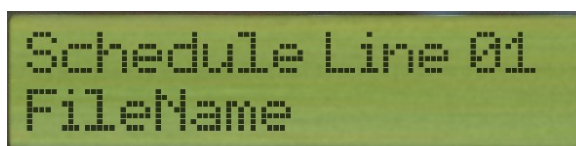
To edit a scheduled task via the LCM,

- Select the **EDIT Option** from the modification menu of the scheduled task you selected.



Schedule Line 01
File Day Time

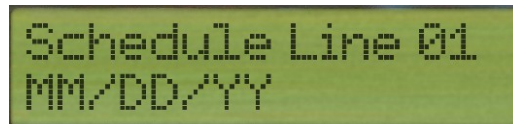
- When you select a schedule task to edit, the LCM will present you with a list of menu items through which you can scroll. To set a specific item, push the knob when it is blinking. Items include:



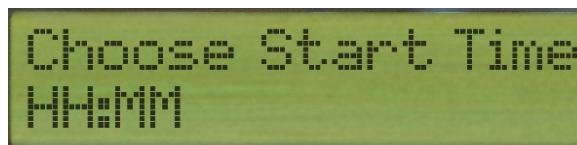
Schedule Line 01
FileName

CHAPTER 7: RECORDING AUDIO

- File—when you select this option, use the knob to scroll through the library. Push the knob to select the file. When selected, the LCM will display a confirmation message (using the upper LCD line and lower LCD line) that you have assigned the sound to the specific scheduled task. You will then be automatically returned to the item list menu for the scheduled task.



- Day—when you select this option, use the knob to scroll through the days. Push the knob to select the day you wish when it is blinking. When selected, the LCM will display a confirmation message (using the upper LCD line and lower LCD line) that you have assigned the scheduled task to the specific day selected. You will then be presented with an option to select the date. The lower LCD line will display "MM/DD/YY" with the first M blinking. Use the knob to scroll through the digits until you find the correct one representing the date you wish for the scheduled task. Push the knob in to select. Repeat for each digit. When you have finished, you will be returned to the main item menu for the scheduled task.

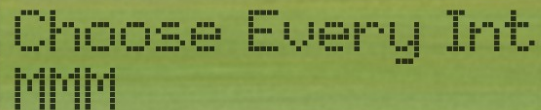


- Time—when you select this option, the upper LCD line will display "Choose Start Time" and the lower LCD line will display "HH:MM" with the first H blinking. Use the knob to scroll through the digits until you find the correct one representing the time you wish for the scheduled task to start. Push the knob in to select. Repeat for each digit. When you have finished, you will be returned to the main item menu for the scheduled task.



- Until—when you select this option, the upper LCD line will display "Choose Until Time" and the lower LCD line will display "HH:MM" with the first H blinking. Use the knob to scroll through the digits until you find the correct one representing the time you wish for the scheduled task to work until. Push the knob in to select. Repeat for each digit. When you have finished, you will be returned to the main item menu for the scheduled task.

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Choose Every Int
MMM

- Every—when you select this option, the upper LCD line will display “Choose Every Interval” and the lower LCD line will display “MMM” with the first M blinking. Use the knob to scroll through the digits until you find the correct one representing the number of minutes you wish for the scheduled task to work. Push the knob in to select. Repeat for each digit. When you have finished, you will be returned to the main item menu for the scheduled task.



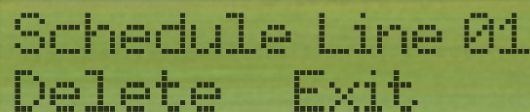
Choose Repeat
**

- Repeat—when you select this option, the upper LCD line will display “Choose Repeat” and the lower LCD line will display “**” with the first * blinking. Use the knob to scroll through the digits until you find the correct one representing the number of times you wish the scheduled task to repeat within the time frame specified. Push the knob in to select. Repeat for each digit. When you have finished, you will be returned to the main item menu for the scheduled task.
- Exit—save settings and return to the list of scheduled tasks

Delete a Scheduled Task

To delete a scheduled task via the LCM,

- Select the **DEL Option** from the modification menu of the scheduled task you selected.



Schedule Line 01
Delete Exit

- When the DEL option is selected, the upper LCD line reads “Schedule Line XX” and the bottom provides two options:
 - Delete, and
 - Exit
- To delete the scheduled item, push the knob when the delete option is blinking (if it's not blinking, use the knob to scroll until it is)

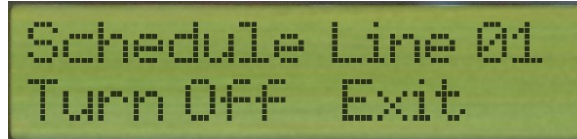
CHAPTER 7: RECORDING AUDIO

- Upon selecting delete, you will be returned to the item menu

Turning a Scheduled Task On/Off

To turn a scheduled task on or off via the LCM,

- Select the **OFF/ON Option** from the modification menu of the scheduled task you selected. Note: the actual name of the item “On” or “Off” depends upon the current state of the selected scheduled task.

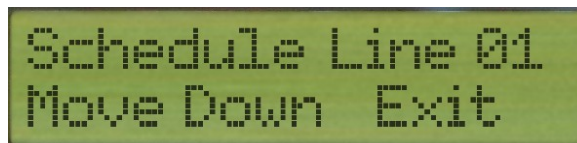


- When the option is selected, the upper LCD line reads “Schedule Line XX” and the bottom provides two options:
 - Turn Off (or Turn On), and
 - Exit
- To change the state of the scheduled item, push the knob when the Turn Off or Turn On option is blinking (if it's not blinking, use the knob to scroll until it is)
- Upon selecting the option, you will be returned to the item menu

Moving a Scheduled Task

To move a scheduled task down in the task list via the LCM,

- Select the **DOWN Option** from the modification menu of the scheduled task you selected.



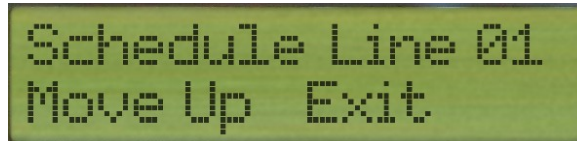
- When the option is selected, the upper LCD line reads “Schedule Line XX” and the bottom provides two options:
 - Move Down, and
 - Exit
- To move the scheduled task down 1 place in the scheduled task list, push the knob when the Move Down option is blinking (if it's not blinking, use the knob to scroll until it is)

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- Upon selecting the option, you will be returned to the item menu. Note: if you wish to move the scheduled task down further, you must repeat this process.

To move a scheduled task up in the task list via the LCM,

- Select the **UP Option** from the modification menu of the scheduled task you selected.



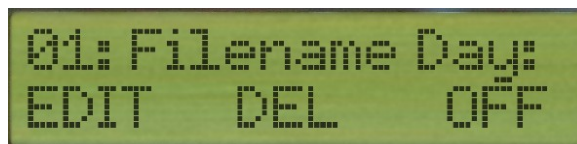
- When the option is selected, the upper LCD line reads "Schedule Line XX" and the bottom provides two options:
 - Move Up, and
 - Exit
- To move the scheduled task up 1 place in the scheduled task list, push the knob when the Move Up option is blinking (if it's not blinking, use the knob to scroll until it is)
- Upon selecting the option, you will be returned to the item menu. Note: if you wish to move the scheduled task down further, you must repeat this process.

Adding a Scheduled Item

To add a new scheduled task from the LCM,



- From the Main Menu, turn the knob until the LCD reads "SCHEDULE"
- Press the knob to select. Once selected, the top line will read "Schedule." The bottom line displays, "Scroll down to view/edit"



- To find a scheduled task, turn the knob to scroll through the scheduled tasks. Each one will display (horizontally scrolling) as;

CHAPTER 7: RECORDING AUDIO

- ##: FILENAME Day: datefield Time: timefield Until: untilfield
Every: everyfield Repeat: repeatfield
- To enter the modification mode, push the knob when the scheduled task you want to modify is displayed.
- The modification mode includes six options that can be scrolled through with the knob:
 - EDIT
 - DEL
 - OFF/ON
 - DOWN
 - UP
 - EXIT
- To add the new item, scroll once past the last menu item (Exit). This will display an Add option. Press the knob to select this option.
- When the Add option is selected, the upper LCD line will display "Add Line to Schedule?" and the lower line will display, "Click to add, or scroll on top to exit"
- Push the knob button to create a new scheduled task one number higher than the highest schedule number. So, if the last scheduled task is number 15, this will create number 16. Note: this makes the new task the lowest in priority.
- Creating the details of the new scheduled task is identical to editing an existing task. For more information, read the appropriate section on editing a task through the LCM.



Playing Sounds

The SuperConductor has two output connections (left and right) on the back panel for stereo output to your sound system.

Audio files loaded onto the SuperConductor can be played back in a number of ways:

- Via remote control (through the web-interface),
- Via the knob on the unit, and
- Via CGI network command.

Via Remote Control

Playback of audio files by remote control through the web-interface is explained in the Remote Control chapter.

Via the Knob

To playback audio files using the knob on the SuperConductor unit,

- From the unit, turn the knob until you find the file you wish to play and press the knob. This will display on the top-line of the LCD. When you press the knob, the file will immediately begin to play.
- You can then also assign a follow-up file to play via the second line of the LCD, following the same instructions as above.

Note: Any sounds triggered from the front knob and screen interrupt any scheduled sounds playing - but the scheduled sounds resume at the next event once front-knob playback stops.

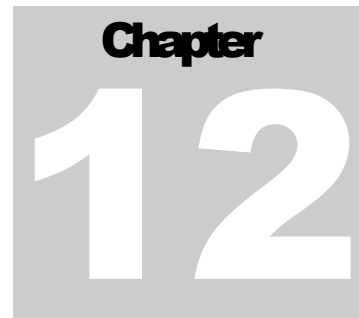
Via CGI Command

You can also initiate playback of audio through CGI command sent to the IP address of the unit. For example:

CHAPTER 11: PLAYING SOUNDS

- Example of link to play Sound assigned to knob position 7 with play mode "one" (once):
 - [http://192.168.0.30/BAS.cgi?rc=1&sound=7&plmod\\$=ONE](http://192.168.0.30/BAS.cgi?rc=1&sound=7&plmod$=ONE)
- Example of link to play sound in library,
 - [http://192.168.0.30/BAS.cgi?rc=2&name\\$=BS&plmod\\$=ONE](http://192.168.0.30/BAS.cgi?rc=2&name$=BS&plmod$=ONE)
- Example of link to stop sound playback:
 - <http://66.92.95.105/BAS.cgi?rc=1&sound=0>

For a more comprehensive listing of CGI commands and correct syntax, see Appendix A.



Security

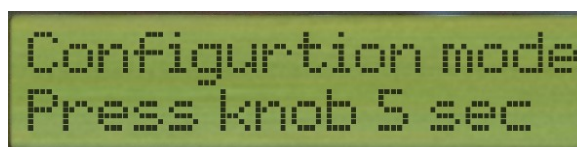
The SuperConductor includes security features that require a password for playback from either the web-interface or the LCM.

Web Interface

In order to access the Control tab of the web-interface, you must enter the authentication password specified in the Settings tab. Upon successful authentication, you will be able to access all of the tabs.

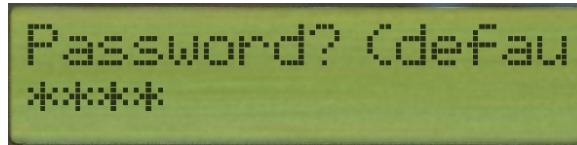
LCM

In order to access the LCM, you must provide the assigned password,



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- First, set the unit into local configuration mode (LCM) by turning the knob one turn past the last music assignment. In a new unit, you shouldn't have any assigned slots.
- Press the knob for 5 seconds (as indicated on the LCD)



- Upon first entering the LCM , you will be required to specify your password. The unit comes pre-configured with a default password of 0000.
- In authentication mode, the top line of the LCD will read "Password" and the bottom will read "XXXX" with the first "X" blinking.
- To enter the password, turn the dial for each "X" until the appropriate digit is displayed. Press the knob to advance to the next digit. When finished, press the knob again. Upon successful authentication, the LCD will display "Main Menu"



Appendix A: CGI Commands

The CGI Command feature allows you to remotely control playback by sending commands through the Common Gateway Interface (CGI).

The SuperConductor includes a small, light-weight web server that receives commands through Port 80.

Parameters

The following table provides an overview of some of the available CGI parameters:

Parameter	Description	Values
-----------	-------------	--------

CHAPTER 11: PLAYING SOUNDS

rc	Numerical command issued to unit to begin action	1, 2, 3
name\$	The name of the file without extension	NA
plmod\$	The play mode for the file.	ONE=play once LOOP=play continuously
Sound	Starting and stopping playback	0=stop playback 1=start playback
B524	Knob lockout	0 = lockout 1 = not lockout
KREC	Knob position	Number associated with a free knob position (for recording)
L	Name of page that initiates command to unit	i.e., control.html

Syntax

The following is the syntax for all CGI commands:

- Location: the URL of your Superconductor unit. For example:
"http://192.168.1.5/
- CGI Application: the name of the CGI application (BAS.cgi)
- rc command
- file name (optional)
- command

Below are some examples of CGI commands and an explanation of the actions they perform.
Note: this examples utilize an IP address of 192.168.0.30. For correct operation with your SuperConductor unit, you must replace this IP address with the actual IP address of your unit.

- Play a Knob Sound
 - COMMAND: http://192.168.0.30/BAS.cgi?
rc=1&sound=1&plmod\$=ONE
 - PARAMETERS:
 - rc = 1 (play knob sound function)

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- sound = knob position to play, 1, 2 ... to 99
- plmod = play mode, ONE or LOO
- Play a file
 - COMMAND: `http://192.168.0.30/BAS.cgi?rc=2&name$=NINETEEN&plmod$=ONE`
 - PARAMETERS
 - rc = 2 (play a file function)
 - name = file name to play, 1, 2 ... to 99
 - plmod = play mode, ONE or LOO
- Stop Playing
 - COMMAND: `http://192.168.0.30/BAS.cgi?rc=1&sound=0`
 - COMMAND: `http://192.168.0.30/BAS.cgi?rc=2&name$=`
 - PARAMETERS:
 - None
- Knob Lockout
 - COMMAND: `http://192.168.0.30/setup.cgi?L=reboot.html&B524=1`
 - COMMAND: `http://192.168.0.30/setup.cgi?L=reboot.html&B524=1`
 - PARAMETERS:
 - B524=1 set knob lockout on
 - B524=0 set knob lockout off

Note: this command stores the setting in the non-volatile memory and causes a device reset.

- Start Recording
 - COMMAND: `http://192.168.0.30/BAS.cgi?KREC=0&RC=3&L=control.html`
 - PARAMETERS:
 - rc = 3 (start recording function)

CHAPTER 11: PLAYING SOUNDS

- KREC is a free knob position
- Stop Recording
 - COMMAND: `http://192.168.0.30/BAS.cgi?KREC=0&L=control.html`
 - PARAMETERS:
 - None



Appendix B: Quick LCM Access

LCM Function	Steps
Configuration Mode	Scroll past last knob setting Push and hold control knob until password displays Enter password by turning knob at each star until correct digit displays and then pressing the knob
Play a Sound	Cycle knob through sounds Press knob to play selected sound
Reset Device (in the event that the firmware is update or the device freezes)	depress the reset button all the way for one second